

BYKOVA, A.I., kandidat meditsinskikh nauk

Eye injuries in some groups of agricultural workers and its prevention. Oft.zhur. 11 no.1:21-24 '56. (MIRA 9:9)

1. Iz kafedry glaznykh bolezney (zav.-prof. A.M.Dodigina) L'vovskogo meditsinskogo instituta.

(EYE-WOUNDS AND INJURIES) (AGRICULTURE--ACCIDENTS)

BYKOVA, A.I., dotsent

Diagnostic significance of studying eye function in neuroinfections. Oft.shur. 12 no.5:287-291 '57. (MIRA 13:6)

1. Iz kafedry glasnykh bolezney (sav. - prof. A.M. Rodigina) i iz kafedry nervnykh bolezney (sav. - prof. N.V. Mirtovskiy) L'vovskogo meditsinskogo instituta.
(NERVOUS SYSTEM--DISEASES) (BYM)

BYKOVA, Anna Leonidovna. Primali uchastiye: VEYSMAN, M.I.[deceased];
LUZIN, A.L.; SHCHENKOV, S.A., prof., red.; MEDVEDEVA, R., red.
izd-va; TELEGINA, T., tekhn. red.

[The theory of accounting] Teoriia bukhgalterskogo ucheta. Pod
red. S.A.Shchenkova. Moskva, Gosfinizdat, 1962. 352 p.
(Accounting) (MIRA 15:7)

OKHAPKINA, L.L.; BYKOVA, A.P.; YEVSTRATOVA, G.A.

Rapid determination of nitrogen in coals. Zav.lab. 31
no.3:277-279 '65. (MIRA 18:12)

1. Institut nefte- i uglekhimicheskogo sinteza pri
Irkutskom gosudarstvennom universitete im. A.A.Zhdanova.

~~BYKOV~~ A. S. uchitel'nitsa

Role of the chemistry teacher in the propagation of chemical
knowledge. Khim.v shkole 14 no.4:70-72 J1-Ag '59.
(MIRA 12:11)

1. Shkola No.156 g.Moskvy.
(Chemistry--Study and teaching)

ББК.0.0, А.В.

31

PHASE I BOOK EXPLOITATION

607/5740

Akademiya nauk SSSR. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov

Voprosy mineralogii, geokhimii i genezisa zasutorozhdeniy redkikh elementov
(Problems in Mineralogy, Geochemistry, and Deposit Formation of Rare Elements)
Moscow, Izd-vo AN SSSR, 1960. 253 p. (Series: Its: Trudy, vyp. 4) Errata
printed on the inside of back cover. 2,200 copies printed.

Chief Ed.: K. A. Vlasov, Corresponding Member, Academy of Sciences USSR;
Resp. Ed.: V. V. Lyukhovich; Ed. of Publishing House: L. S. Tarasov;
Tech. Ed.: P. S. Kashina.

PURPOSE: This book is intended for geologists, mineralogists, and petrographers.

COVERAGE: This is a collection of 23 articles on the formation, geology,
mineralogy, petrography, and geochemistry of deposits of rare elements in
Siberia and [Soviet] Central Asia. The distribution and characteristics of
rare elements found in these areas as well as some quantitative and qualitat-
ive methods of investigating the rocks and minerals in which they are found,

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Problems in Mineralogy (Cont.)

EST/5740

or with which they are associated, are discussed. Two articles present an economic investigation of the possibilities of industrial extraction and utilization of selenium, tellurium, and hafnium. No personalities are mentioned. Each article is accompanied by references.

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Problems in Mineralogy (Cont.)

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Problems in Mineralogy (Cont.)

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Problems in Mineralogy (Cont.)

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and Tellurium From the Products of Copper-Molybdenum Ore Processing

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Kaganovich, S. Ya. Hafnium (Economic Survey)

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AVAILABLE: Library of Congress

Card 6/6

JA/GMM/HMS
11-14-61

SEMENOV, Ye.I.; BYKOVA, A.V.

Beryllosodalite. Dokl.AN SSSR 133 no.5:1191-1193 Ag '60.
(MIRA 13:8)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh
elementov Akademii nauk SSSR. Predstavleno akad. N.V.Belovym.
(Lovozero Tundras--Sodalite)

BORODIN, L.S.; BYKOVA, A.V.; KAPITONOVA, T.A.; PYATENKO, Yu.A.

Recent data on zirconolite and its niobium variety. Dokl. AN SSSR
134 no.5:1188-1191 O '60. (MIRA 13:10)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov
Akademii nauk SSSR. Predstavleno akademikom N.V.Belovym.
(Afrikanda ~~Region~~--Zirconolite)
(Aldan Plateau--Zirconolite)

SEMENOV, Ye.I.; KHOMYAKOV, A.P.; BYKOVA, A.V.

Hypergenetic ~~bastnaesite~~ in the weathering crust of the alkali
massif. Trudy min. muz. no.11:202-204 '61. (MIRA 16:7)

(~~Bastnaesite~~)

ZDORIK, T.B.; SIDORENKO, G.A.; BYKOVA, A.V.

Calzirtite, a new calcium titanozirconate. Dokl. AN SSSR 137
no.3:681-684 Mr '61. (MIRA 14:2)

1. Vsesoyuznyy institut mineral'nogo syr'ya. Predstavleno akademikom
D.I.Shcherbakovym.
(Siberia, Eastern—Zirconates)

BORODIN, L.S.; BYKOVA, A.V.

Zirconium schorlomite. Dokl. AN SSSR 141 no.6:144-1456 D '61.
(MIRA 14:12)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh
elementov AN SSSR. Predstavleno akademikom N.V.Belovym.
(Schorlomite) (Zirconium)

SITNIN, A.A.; BYKOVA, A.V.

First find of microlite in granites. Dokl. AN SSSR 147
no.1:203-206 N '62. (MIRA 15:11)

1. Institut mineralogii, geokhimi i kristalloghimii
redkikh elementov. Predstavleno akademikom D.I. Shcherbakovym.
(Microlite)

ZHABIN, A.G.; PUDOVKINA, Z.V.; BYKOVA, A.V.

Calzirtite from the Galinskaya intrusion of ultrabasic
alkaline rocks in polar Siberia. Dokl. AN SSSR 146 no.6:1399-
1400 0 '62. (MIRA 15:10)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh
elementov AN SSSR. Predstavleno akademikom N.V. Belovym.
(Siberia, Eastern—Zirconates)

KALITA, A.P.; BYKOVA, A.V.; KUKHARCHIK, M.V.

Varieties of pyrochlore and betafite in pegmatites. Trudy IMGRE
no.8:201-211 '62. (MIRA 16:1)
(Pyrochlore) (Betafite) (Pegmatites)

KALITA, A.P.; BYKOVA, A.V.

Tantalum betafite from pegmatites of the Lake Ladoga region.
Trudy IMGRE no.7:104-107 '61. (MIRA 16:11)

KHVESTOVA, V.A.; BYKOVA, A.V.

Accessory orthites in southern Yakutia. Trudy IMGRE no.7:
130-137 '61. (MIRA 16:11)

SEMENOV, Ye.I.; KOCHEMASOV, G.G.; BYKOVA, A.V.

Zirkelite and rosenbushchite from contact-metasomatic rocks in
the Lovozero Tundras. Trudy IMGRE no.15:106-109 '63.
(MIRA 16:11)

KAPUSTIN, Yu.L.; BYKOVA, A.V.

First find of hiordahlite in the U.S.S.R. Dokl. AN SSSR 161 no.3:683-686 Mr '65. (MIRA 18:4)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov AN SSSR. Submitted November 12, 1964.

SEMENOV, Ye.I.; BYKOVA, A.V.

Beryllium borate, hambergite in the alkali pegmatites of the Lake
Baikal region. Dokl. AN SSSR 161 no.6:1407-1408 Ap '65. (MIRA 18:5)

1. Submitted November 18, 1964.

SEMENOV, Ye.I.; KHOMYAKOV, A.P.; BYKOVA, A.V.

New mineral "magbasite." Dokl. AN SSSR 163 no.3:712-719 JI '65.

(MIRA 18:7)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh elementov.

Submitted November 18, 1964.

MINEYEV, D.A.; SKOROBGATOVA, N.V.; BYKOVA, A.V.

Composition of pyrochlore group minerals from rare-metal
apogranites. Dokl. AN SSSR 164 no.2:399-402 S '65.

(MIRA 18:9)

1. Submitted March 10, 1965.

47335-55 EPF(c)/EWP(j)/EWT(m) Pc-4/Pr-4 RM
 ACCESSION NR: AP5009314

30
 8/0191/65/000/004/0018/0020

AUTHORS: Levitskaya, O. E.; Golyukina, V. B.; Katsnel'son, Ye. S.; Bykova, A. Ya.

TITLE: The effect of certain factors on the consolidation of non-saturated polyester resins

SOURCE: Plasticheskiye massy, no. 4, 1965, 18-20

TOPIC TAGS: polyester, polyester plastic, polyethylene glycol, hardening temperature, hardening method

15
 ABSTRACT: Hardening phenomena occurring in polyester resins are discussed. The substance tested was a 70% styrol mixture of polyethylene glycol maleinates. The mixture was cured at controlled ambient temperature, and measurements of exotherm heat were made using a chrome-nickel thermocouple. Exotherm curves were plotted for 40, 50, 60, and 80°C temperatures. Polyesters were prepared from three different concentrations of ethylene glycol, maleic anhydride, and adipic acid. The three concentrations (see Fig. 1 on the Enclosure) were melted at 195-200°C in an inert gas. Measurements of the acid number and the coefficient of refraction were taken simultaneously for each mixture (see Fig. 2 on the Enclosure). A table is presented giving the following data for each polyester: 1) the acid number, 2) the index of refraction, 3) the viscosity by test VZ-1, 4) the time of gelatinization at 130°C.

L 47335-65

ACCESSION NR: AP5009314

200, 5) the maximum exotherm temperature, and 6) the time to reach maximum temperature. It was noted that increased glycol concentration diminished the reaction capability of the specimens tested. Exotherm measurements were repeated for parametric values of the resin acid number. Additional syntheses were produced with styrol mixtures based on ethylene glycol and fumaric acid. Test measurements similar to those listed above were tabulated for synthesis temperatures of 160 and 185C. The authors concluded that increasing the synthesis temperature of unsaturated polyester tends to increase the reaction capability of its styrol mixtures. Orig. art. has: 3 tables and 5 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: MT

NO REF SOV: 001

OTHER: 006

Card 2/3

GRODNIK, M.G., inzh.; BYKOVA, E.N., inzh.; VELICHANSKIY, Ya.A., inzh.

Purification and drying of carbon dioxide gas in the systems
of carbon dioxide plants. Khol. tekhn. 39 no.5:35-36 S-0 '62.
(MIRA 16:7)

1. Gosudarstvennyy institut po proyektirovaniyu kholodil'nikov,
fabrik morezhenogo, zavodov sukhogo i vodnogo l'da i zhidkoy
uglekisloty.

(Carbon dioxide) (Gases--Purification)

ACCESSION NR: AT3013102

S/2757/62/000/002/0121/0143

AUTHOR: Bykova, E. Ya.

TITLE: On the stability of the solutions of integro-differential and integro-difference equations of the Barbashin type. I.

SOURCE: AN KirgSSR. Institut fiziki, matematiki i mekhaniki. Issledovaniya po integro-differentsial'ny'm uravneniyam v Kirgizii, no. 2, 1962, 121-143

TOPIC TAGS: integrodifferential equation, integrodifference equation, stability of solution, sufficient condition for stability, operator difference equation, nonlinear equation, Barbashin equation

ABSTRACT: The paper is devoted essentially to a study of the sufficient conditions for the stability of the solution of the integro-differential equation

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ACCESSION NR: AT3013102

$$\frac{\partial u(t,x)}{\partial t} = Pu(t,x) + \int_a^b K(x,s)u(t,s)ds + \int_a^b M[x,s,t,u(t,s)]ds + F[x,t,u(t,x)] \quad (1)$$

and the integro-difference equation

$$\varphi(t+h,x) - \varphi(t,x) = h[P\varphi(t,x) + \int_a^b K(x,s)\varphi(t,s)ds + \int_a^b M[x,s,t,\varphi(t,s)]ds + F[x,t,\varphi(t,x)]], \quad (2)$$

where h -- interval of the equation, P -- a constant number; K(x, s) --

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ACCESSION NR: AT3013102

$n \times n$ matrix; $u(t, x)$, $M(x, s, t, u)$, and $F(x, t, u)$ -- n -dimensional vector functions with $M(x, s, t, 0) \equiv F(x, s, t, 0) \equiv 0$. Auxiliary concepts and lemmas are first presented. The structure of the analytic expression of the solutions is then investigated and sufficient conditions for the stability of the solution of one class of the operator difference equations is considered. It is shown then that exponential stability of the solutions is conserved on going from a linear difference equation to a corresponding linear differential equation. The structure of the analytic expression for the solutions is investigated along with the stability of the solutions of the linear integro-differential equation of type (1). The sufficient conditions for the stability of the two types of equations are then studied. The sufficient conditions for the stability of the nonlinear counterparts of these solutions will be investigated separately. "I take this opportunity to thank M. A. Pudovkin, who guided this work, for valuable advice." Orig. art. has: 27 formulas.

Card 3/4

ACCESSION NR: AT3013102

ASSOCIATION: Institut fiziki, matematiki i mekhaniki AN KirgSSR.
(Institute of Physics, Mathematics, and Mechanics, AN KirgSSR)

SUBMITTED: 00

DATE ACQ: 30Sep63

ENCL: 00

SUB CODE: MM

NO REF SOV: 007

OTHER: 000

Card 4/4

BYKOVA, F.M. (Leningrad)

Treasure chest of knowledge. Priroda 53 no.2:116-118 '64.
(MIRA 17:2)

BYKOVA, G.A.
Category : USSR/Magnetism - Experimental methods of magnetism

F-2

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No k389

Author : Korsunskiy, M.I., Fogel', Ya.M., Bykova, G.A., Livshits, L.I., Lozovskiy, N.S.
Chovnik, A.A.

Title : Investigation of the Topography of the Inhomogeneous Plane Magnetic Field
of a Six-Pole Electromagnet.

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 2, 1222-1232

Abstract : A procedure is described for the investigation of the topography of an inhomogeneous plane magnetic field of a six-pole electromagnet, used to focus particles that have a magnetic moment. The cited measurement results show that the above field can be produced without substantial distortion in a circle 10 cm in radius.

Card : 1/1

BYKOVA, G.F.

Visual aids in the formation of mental processes during
the solution of problems. Vop. psikh. 10 no.3:101-
110 My-Je '64. (MIRA 17:9)

1. Kafedra prikladnoy geometrii Moskovskogo ordena Lenina
aviatsionnogo instituta Ordzhonikidze.

SIVASH, K.M., starshiy nauchnyy sotrudnik; BYKOVA, G.P., starshiy inzhener

New and modernized instruments for spinal surgery. Ortop., travm.
i protez. 22 no.4:60-64 Ap '61. (MIRA 14:11)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy
khirurgicheskoy apparatury i instrumentov (dir. - M.G. Anan'yev).
(SURGICAL INSTRUMENTS AND APPARATUS)

AGROSKIN, S. I., kand. med. nauk, zaslužennyy vrach RSFSR; BYKOVA, G. P.,
starshiy inzhener; SHUSTROVA, A. Ya., inzhener

New laryngological instruments for children. Vest. otorin. no.2:
87-88 '62. (MIRA 15:2)

1. Iz detskoy klinicheskoy bol'nitsy No. 1 i iz Nauchno-issledovatel'-
skogo instituta eksperimental'noy khirurgicheskoy apparatury i
instrumentov, Moskva.

(LARYNGOSCOPE AND LARYNGOSCOPY)

PREOBRAZHENSKIY, N.A.; SVETLAYEV, A.P.; SOKOLOV, M.M. [deceased]; BYKOVA, G.P.

Vibrator for mobilizing the stapes and its use in the clinic.

Trudy NIIEKHAI No.5:288-295 '61.

(MIRA 15:8)

1. Iz kliniki bolezney ukha, nosa i gorla 1-go Moskovskogo ordena
Lenina meditsinskogo instituta im. I.M.Sechenova i Nauchno-issledo-
vatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i
instrumentov.

(TYMPANAL ORGAN--SURGERY) (VIBRATORS)

GRAFOV, V.V.; BYKOVA, G.S.

Increasing the strength of cuprammonium fibers. Khim.volok.no.5:72-
73 '64.

(MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

L 38847-66 EWP(j)/EWT(m)/T INF(c) RM
 ACC NR: AR6011877 SOURCE CODE: UN/0001/05/000/016/S043/S048

AUTHOR: Novikov, Ye. G.; Volkova, N. S.; Bykova, G. Ye.

TITLE: Preparation of carbazole-phenol-formaldehyde resins

SOURCE: Ref. zh. Khimiya, Abs. 16S322

REF SOURCE: Sb. Khim. produkty koksovaniya ugley Vost. SSSR. Vyp. 2. Sverdlovsk, 1964, 164-171

TOPIC TAGS: phenolformaldehyde, phenolic plastic, resin

ABSTRACT: The conditions of preparation of carbazole-base novolac resins were studied in detail. The choice of the conditions for the preparation of carbazole formolites in an easily extractable lamellar form was determined by using pure carbazole and various quantities of formalin and H_2SO_4 . The following optimum conditions for the preparation of formolites were found: carbazole/formaldehyde molar ratio equal to 1/3, amount of NH_3 in the aqueous phase 2%, consumption of H_2SO_4 ($d = 1.84$) 11-12% of total charge, acid diluted to a 50-60% concentration. A new method was developed for preparing novolac resin by condensing the carbazole formolite with phenol and formalin while heating the reagent mixture on an oil bath at 100-105°, distilling off the water, and gradually raising the temperature to 130-140°. Indices of the mechanical and dielectric properties of pressed products prepared from carbazole-phenol-formaldehyde resins with fiberglass as filler are given. The high

Card- 1/2

1. 38817-66

ACC NR: AR6011877

quality of the plastics obtained was noted, and it was established that carbazole can partially replace phenol in the production of phenoplasts without reducing their quality. M. Mishchenko. [Translation of abstract]

SUB CODE: 11,07

ms
Card 2/2

ARTYUKHA, V.S.; YAROSHENKO, I.M.; ISAYENKO, I.I.; BYKOVA, I.G.; KOVTUNA, M.V.;
SHTYREVA, Ya.G.

Measures for reducing the amount of compressed air used in the
factory. Prom. energ. 11 no.10:24-25 0 '56. (MLRA 9:11)
(Compressed air)

5(2)

AUTHORS: Kachalov, A. I., Bykova, I. G.

SOV/32-25-3-11/62

TITLE: Joint Determination of Chlorite and Hydrogen Peroxide in the Presence of Chlorides, Chlorates, Carbonates, and Alkali Lyes (Sovmestnoye opredeleniye khlorita i perekisi vodoroda v prisutstvii khloridov, khloratov, karbonatov i yedkikh shchelochey)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 3, pp 289 - 290 (USSR)

ABSTRACT: In the production of sodium chloride by a reduction of chlorine dioxide with hydrogen peroxide the concentration of the reacting substances must be checked. Several suggestions were made for the determination of chlorite (Ref 1), however none of them refers to a determination of sodium chlorite in the presence of hydrogen peroxide. The following method is recommended: First, the sum of sodium chlorite + hydrogen peroxide is iodometrically determined, hydrogen peroxide is then destroyed and only the sodium chlorites are iodometrically determined. Experiments were carried out with

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Joint Determination of Chlorite and Hydrogen Peroxide SOV/32-25-3-11/62
in the Presence of Chlorides, Chlorates, Carbonates, and Alkali Lyes

MnO₂, Raney nickel, lead dioxide, etc for the destruction of hydrogen peroxide, and it was found that the best effect is obtained with lead dioxide. This method of determination was checked with technical products (with 65-80% chlorite) (Table) and it was found that the presence of chlorides, chlorate, and carbonate does not disturb the analysis. Its accuracy meets the demands of an operational control. There are 1 table and 1 Soviet reference.

Card 2/2

KACHALOV, A. I., kand.khim.nauk; BYKOVA, I.G.

Activation of chlorate for pulp bleaching. Bum.prom. 34 no.7:
5-7 J1 '59. (Mina 12:10)
(Woodpulp) (Chlorates)

KACHALOV, A.I., kand.tekhn.nauk; BYKOVA, I.G.; CHASHCHIN, V.I.

Industrial method of the production of chlorine dioxide.
Bum.prom. 34 no.8:14-16 Ag '59. (MIRA 12:12)
(Chlorine oxide) (Woodpulp)

KACHALOV, A.I., kand.khim.nauk, BYKOVA, I.G.

Preparation of chlorine dioxide for small consumers. Khim.
prom. 2:164-166 My '60. (MIRA 13:7)
(Chlorine oxide)

S/064/60/000/004/016/021/XX
B013/B063

AUTHORS: Kachalov, A. I., Candidate of Chemical Sciences, Bykova,
I. G., Balashov, L. N., Chashohin, V. I.

TITLE: Industrial Production of Sodium Chlorite

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 4, pp. 72-75

TEXT: The authors have worked out and tested a scheme for the continuous production of chlorine dioxide and sodium chlorite from sodium chlorate. Methanol and hydrogen peroxide are used for reduction in the first and second stage, respectively. Chlorine dioxide is obtained in three successively operating steel vessels (7), lined with diabase and having an attachment of Raschig rings. A mixture of a sodiumchlorate solution and 25-35% methanol is gradually heated as it passes through the reaction vessels (from 60 to 80°C). The residue from the last vessel is discharged. The resulting chlorine dioxide is diluted with air until an explosion-proof concentration is reached (not more than 10%). The diluted chlorine dioxide is then passed into a cascade of three absorbers of the bubbling

Card 1/4

Industrial Production of Sodium Chlorite

S/064/60/000/004/016/021/XX
B013/B063

type (8). 30% hydrogen peroxide is passed into all three absorbers, and an alkaline solution with a concentration of 160 g/l is poured into the last absorber. Temperature is maintained at 0-2°C. Sodium-chlorite solutions with a content of 140-160 g/l NaClO₂, 15-20 g/l NaCl, 30-40 g/l Na₂CO₃, and 0.5-1.0 g/l H₂O₂ are obtained after absorption. Sodium chlorite is evaporated in vacuo between 70 and 80°C. Subsequently, the sodium-chlorite solution (concentration: 350-400 g/l) is passed through a crystallizer (14) with a temperature of -5 to -10°C and then filtered by a suction filter. The initial solution may be used again, while the sodium chlorite may be put at the consumer's disposal. Only an absolutely dry product can be stored in sealed containers for several years. Sodium chlorite can be dried either in a vacuum drying apparatus at 70-80°C or with the use of dry air in a boiling layer at room temperature. The last-mentioned method appears to be more promising. Dried commercial sodium chlorite contains 80-85% NaClO₂, 10-12% NaCl, and 5-8% Na₂CO₃. The method suggested is undangerous and very convenient, provided the production process is carefully checked and technical specifications are strictly observed. The concentration of chlorine dioxide in the reaction gas was measured with an automatic photo-

Card 2/4

Industrial Production of Sodium Chlorite

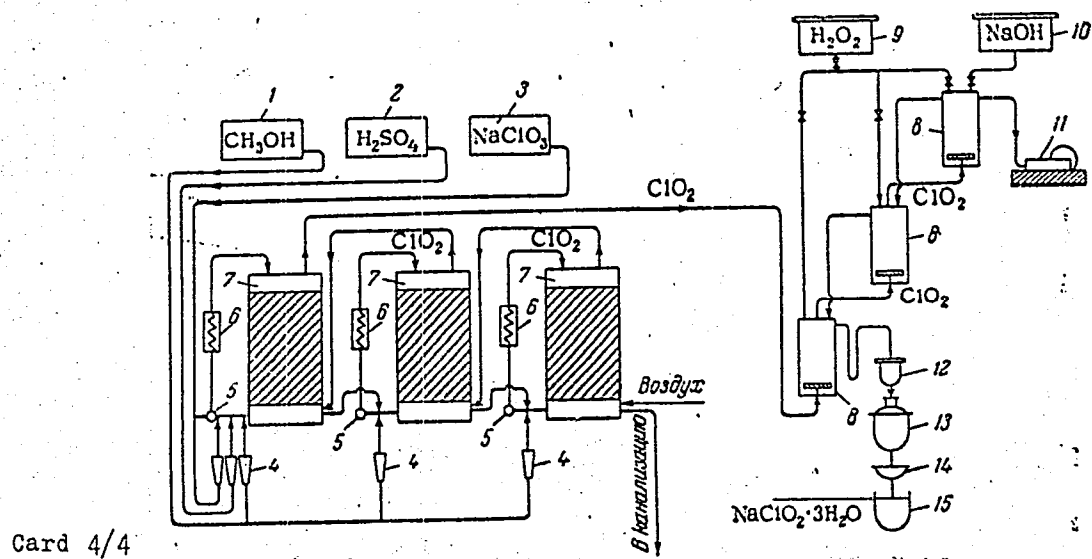
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colorimeter provided with $\Phi KC-M$ (FKS-M) photoresistors. The process is automatically checked and controlled by measuring the redox potential with a couple of platinum (iridium)-calomel electrodes. The potentials were recorded by an ЭПД (EPD) potentiometer. The formation of sodium chlorite may be determined from the redox potential. The method of potentiometric checking is recommended for use in the automation of industrial plants producing sodium chlorite. An automatic photocolormeter is recommended for the determination of the concentration of chlorine dioxide. There are 3 figures, 1 table, and 8 non-Soviet references.

Legend to Fig. 1: 1, 2, 3, 9, 10: Measuring vessels; 4: rotameter; 5: pumps; 6: heat exchanger; 7: reaction vessels; 8: absorbers; 11: РМК-2 (RMK-2) vacuum pump; 12: alkali collector; 13: vacuum evaporator; 14: crystallizer; 15: suction filter.

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S/064/60/000/004/016/021/XX
B013/B063



KIRIKOV, V.P.; BYKOVA, I.I.

New data on the geology of the eastern part of the Pripet fault.
Inform.sbor. VSEGEI no.43:97-110 '61. (MIRA 14:12)
(Pripet Valley--Geology)

REMEZOV, N.P. (deceased); SAMOYLOVA, Ye.M.; SVIRIDOVA, I.E.; BOGASHOVA,
L.G.; Priznaniya uchastiy: BYKOVA, I.N.; SHMUROVA, E.M.;
UTENKOVA, A.P.; POYARKOVA, L.A.; BAZILEVICH, N.I.

Dynamics of the interaction of oak forests and soils.

Pochvovedenie no.3:1-14 Mr '64.

(MIRA 17:4)

1. Sotrudniki kafedry pochvovedeniya Moskovskogo gosudarstvennogo
universiteta imeni Lomonosova (for Samoylova, Bogashova, Poyarkova,
Shmurova, Utenkova). 2. Sotrudniki Voronezhskogo zapovednika
(for Poyarkova, Sviridova).

BY NOVE I.V.

3

USSR.

Diffusion of various substances through hydrocellulose
Rams. A. B. Pakshver and L. V. Bykova. *Colloid*
(U.S.S.R.) 10, 815-70 (1954) (English translation). See C.A.
40/2331d. H. L. H.

gen

BYKOV, L. S. R.

Diffusion of various substances through hydrocellulose films. A. B. Pakshver and L. V. Bykova (Inst. Chem. Technol., Ivanovo). *Kolloid. Zh.* 16, 581-8 (1954); cf. C.A. 48, 14217e. The diffusion coeff. D sq. cm./sec. of a substance in aq. soln. through a cellophane (I) film increased in time because I gradually swelled. E. g., D of NaOH was 10^{-4} through initially dry, and 10^{-3} through swollen, I. Even in the steady state, a I film originally dried under tension gave lower D values (e.g., 2.0×10^{-4} for 3.3% NaOH at 25°) than an undried film ($D = 2.3 \times 10^{-4}$). The former film increased its thickness in 3.3% NaOH 1.25 times, and the latter 1.48 times. Similar results were obtained for the diffusion of methylene blue and glycerol. Stirring the soln. in contact with I accelerated the diffusion when D was between 10^{-4} and 10^{-3} but was ineffective at smaller D . D increased with temp., e.g., from 0.2×10^{-4} to 0.3×10^{-4} for methylene blue and 0.35×10^{-4} to 0.49×10^{-4} for glycerol when temp. rose from 20° to 30°. L. I. Bikerman

BYKOVA, I.V., nauchnyy sotrudnik

Polyvinyl alcohol sizing. Tekst.prom. 19 no.2:56 # '59.
(MIRA 12:5)

1. Ivanovskiy nauchno-issledovatel'skiy tekstil'nyy institut.
(Sizing (Textile))

BYKOVA, I.V., starshiy nauchnyy sotrudnik

Use of homogenizers in sizing. Tekst.prom. 21 no.6:45-47 Je
'61. (MIRA 15:2)

1. Ivanovskiy nauchno-issledovatel'skiy tekstil'nyy institut.
(Sizing(Textile))

BYKOVA, I.V.

Use of homogenizers for size preparation. Nauch.issl.trudy IvNITI
25:95-112 '61. (MIRA 15:10)
(Sizing (Textile)) (Homogenization)

DUBROVSKIY, Yevgeniy Petrovich; KOROTKIY, S.A., nauchnyy red.;
BYKOVA, I.V., red.; BARANOVA, N.N., tekhn. red.

[Training sites for linemen engaged in welding cables and
work on municipal telephone networks] Uchebnye poligony dlia
podgotovki kabel'shchikov-spaishchikov i lineinykh monterov
svyazi gorodskikh telefonnykh setei. Moskva, Proftekhizdat,
1962. 163 p. (MIRA 16:4)

(Electric engineering—Handbooks, manuals, etc.)

(Telephone lines—Handbooks, manuals, etc.)

BYKOVA, I.V., st. nauchn. sotr.; STEPANOV, A.S., st. nauchn.
sotr.; SOLOV'YEV, A.P.; AFANAS'YEVA, A.A., st. nauchn.
sotr.; BOGATYREVA, L.M.; LIFENTSOVA, A.S.; SHUBA, L.S.,
red.; TIMOFEYEVA, Ye.A., red.

[Food product substitutes in the textile industry] Zameni-
teli pishchevykh produktov v tekstil'noi promyshlennosti.
Moskva, 1963. 67 p. (MIRA 17:12)

1. Moscow. Tsentral'nyy institut nauchno-tehnicheskoy
informatsii legkoy promyshlennosti. 2. Rukovoditel' labo-
ratorii spetsial'noy otdelki Ivanovskogo nauchno-issledo-
vatel'skogo instituta khlopchato-bumazhnoy promyshlennosti
(for Solov'yev). 3. Ivanovskiy nauchno-issledovatel'skiy
institut khlopchato-bumazhnoy promyshlennosti (for all
except Shuba, Timofeyeva).

KUDRYAVTSEV, Aleksandr Mikhaylovich; FILIPENKO, Serafim Grigor'yevich;
KORESHKOVA, Z.S., nauchnyy red.; BYKOVA, I.V., red.;
NESMYSLOVA, L.M., tekhn. red.

[Industrial training of operators of coal cutters and cutter-loaders] Proizvodstvennoe obuchenie mashinistov vrubovyykh, vrubovo-pogruzochnyykh mashin i ugol'nykh kombinov.
Moskva, Proftekhi₂dat, 1963. 121 p. (MIRA 16:8)
(Coal mining machinery)

DAVYDOV, Nikolay Ivanovich; NASONOV, L.N., nauchn. red.; BYKOVA,
I.V., red.; NESMYSLOVA, L.M., tekhn. red.

[Industrial training of stope miners] Proizvodstvennoe
obuchenie gornorabochikh ochistnogo zaboia. Moskva, Prof-
tekhizdat, 1963. 72 p. (MIRA 16:10)

(Stoping (Mining))

(Mining engineering--Study and teaching)

DUBETS, Stepan Grigor'yevich; PLOTNIKOV, Aleksey Mikhaylovich;
NAUMKIN, I.F., nauchn. red.; BYKOVA, I.V., red.

[Industrial training of miners of horizontal and inclined workings; the coal industry] Proizvodstvennoe obuchenie prokhodchikov gorizontal'nykh i naklonnykh vyrabotok; ugol'naya promyshlennost'. Moskva, Proftekhizdat, 1963. 102 p.
(MIRA 17:4)

DEULINA, Z.A.; DROZDOV, S.A.; HYKOVA, I.V., red.

[Teaching of the special technology of weaving in professional technical schools; the cotton industry. Methodological textbook] Prepodavanie spetsial'noi tekhnologii tkachstva v professional'no-tekhnicheskikh uchilishchakh; khlopchatobumazhnaya promyshlennost'. Metodicheskoe posobie. Moskva, Vysshaia shkola, 1964. 120 p.

(MIRA 17:9)

KATS, Mikhail Isayevich; KORF, Esfir' Isaakovna; KUSHELEV, V.P.,
nauchn. red.; BYKOVA, I.V., red.; GUREVICH, I.F., red.

[Safety measures in the enterprises of the chemical industry;
what an operator of chemical equipment should know about the
safety of work conditions] Tekhnika bezopasnosti na pred-
priyatiyakh khimicheskoi promyshlennosti; chto dolzhen znat'
apparatchik khimicheskogo proizvodstva o bezopasnykh uslo-
viyakh raboty. Moskva, Vysshaya shkola, 1964. 91 p.
(MIRA 18:2)

BYKOVA, I.V.

Use of hydroxyethyl cellulose in yarn sizing. Nauch.-issl.trudy
IvNITI 26:109-127 '63. (MIRA 18:4)

TROITSKIY, S.G.; SHASHKIN, V.L.; BYKOVA, K.I.

Instrument spectra of γ -radiation from infinite strata of uranium
ore. Atom. energ. 12 no.1:67-70 Ja '62. (MIRA 15:1)
(Gamma rays---Spectra) (Uranium)

TROITSKIY, S.G.; SHASHKIN, V.L.; BYKOVA, K.I.

Possibility for separate determination of uranium and thorium on
measurements of γ -ray spectra from ores occurring naturally.

Atom. energ. 12 no.1:70-72 Ja '62. (MIRA 15:1)

(Gamma rays--Spectra) (Uranium) (Thorium)

BERKOVICH, T.M.; ISAYEVA, O.A.; NOVIKOVA, D.A.; KRUNYA, Z.F.; LEVICHEVA, M.M.;
TRET'YAKOVA, R.K.; BYKOVA, K.M.

Study of combined processes of heat and moisture treatment of
asbestos-cement sheets for N.I.Ershov's unlined mechanized
production-line units. Trudy NIIAsbesttsementa no.15:38-56
'62.

(Asbestos cement)

(MIRA 16:7)

BERKOVICH, T.M.; ISAYEVA, O.A.; BYKOVA, K.M.; LEVICHEVA, M.M.; KRUNYA, Z.P.;
VOLKOVA, S.B.

Intensifying the hardening process of asbestos-cement sheets made
with portland cement by additional brief wetting of the semifinished
product. Trudy NIIAsbesttsementa no.15:64-81 '62. (MIRA 16:7)
(Asbestos cement)

BYKOVA, L.

Progressive forms of commerce in the Kirghiz S.S.R.
Sov.torg. 33 no.7:30-31 J1 '60. (MIRA 13:7)

1. Starshiy inspektor otdela organizatsii trgovli Minister-
stva trgovli, g.Frunze.
(Kirghisistan--Retail trade)

POMYALOV, N. (g. Omsk); BYKOVA, L. (G.Omsk)

Our masters have skillful hands. Prom.koop. 14 no.1:24 Ja '60.
(MIRA 13:5)

(Omsk--Service industries)

KOSTIN, B.A., red.; KABANOV, V.I., red.; SEROVA, Ya.V., red.;
BYKOVA, L.B., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Assembly and use of safety devices in petroleum and gas
production] Montash i eksploatatsiya prispoblenii po tekhnike
bezopasnosti v neftegazodobyvaushchei promyshlennosti.
Izd.2., perer. i dop. Moskva, Gostoptekhizdat, 1963. 212 p.
(MIRA 16:4)

1. Baku. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy institut
po tekhnike bezopasnosti.
(Oil fields--Equipment and supplies)

RYABTSEV, N.I., red.; BUKHIN, V.Ye., red.; VIGDORCHIK, D.Ya., red.;
IVANOV, N.P., red.; KNAPP, K.K., red.; KOZLOV, S.S., red.;
PROFERANSOV, V.P., red.; SLOBODKIN, M.S., red.; SHAROVATOV,
L.P., red.; BYKOVA, L.B., ved. red.; KORSUN, Ye.P., red.;
USHAKOVA, A.F., ved. red.; POLOSINA, A.S., tekhn. red.

[Gas equipment, apparatus, and fittings; reference book]Ga-
zovoe oborudovanie, pribory i armatura; spravocnoe rukovod-
stvo. Moskva, Gostoptekhhizdat, 1963. 469 p. (MIRA 16:4)
(Gas, Natural--Pipelines) (Gas appliances)

LOGINOV, Vasily Sergeyevich; BYKOVA, L.B. ved. red.; POLOSINA,
A.S., tekhn. red.

[Nonmetal gas pipelines] Nemetallicheskie gazoprovody.
Moskva, Gostoptekhzdat, 1963. 238 p. (MIRA 16:11)
(Gas, Natural--Pipelines)

BROUNSHTEYN, B.I.; BYKOVA, L.G.; POKORSKIY, V.N.; USTRAYKH, M.A.;
YABLOCHKINA, M.N.

Experimental check of the method of calculating the height of
countercurrent packed and plate columns in processes involving
the solution of a one-component disperse phase (the system toluene -
diethylene glycol). Zhur.prikl.khim. 34 no.3:548-557 Mr '61.
(MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh
protseessov.

(Plate towers) (Packed towers)

Vegetable-base thermo-insulating material. I. A. Kostin, L. A. Rykova and M. A. Saitova. U.S.S.R. 1,108,458, Dec. 30, 1965. Dried CaSO_4 is steeped for 30 min. in a 15% soln. of $(\text{NH}_4)_2\text{PO}_4$ at 80° . It is then dried at 30° SO_2 and immersed in a 10-15% soln. of polyurethane in CH_2Cl_2 and CH_2Br_2 in a 1:1 ratio for 10-15 min. and the mass is pressed in a roller to 1 kg./sq. cm. and the mass is pressed in a roller to 1 kg./sq. cm. and the mass is pressed in a roller to 1 kg./sq. cm.

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77

KORCHAGIN, N.A., inzh.; BYKOVA, L.I., inzh.

New type of heat insulating material. Sudostroenie 24 no.9:66-68
S '58. (MIRA 11:11)

(Insulating materials)

KOSTIN, B.A.; BYKOVA, L.B., ved. red.; VORONOVA, V.V., tekhn. red.

[Devices for hydromechanical removal of sediments from oil field vessels; album of working drawings] Ustroistva dlia gidromekhanicheskoi ochistki neftepromyslovykh emkostei ot osadka; al'bom rabochikh chertezhei. Moskva, Gostoptekhizdat, 1963. 38 p. (MIRA 17:3)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy institut po tekhnike bezopasnosti.

FRENKEL', Boris Aronovich; BYKOVA, L.B., ved. red.; YAKOVLEVA,
Z.I., tekhn. red.

[Automation in the storage, discharge, and packaging of
petroleum products] Avtomatizatsiia khraneniia i otpuska
nefteproduktov. Moskva, Gostoptekhizdat, 1964. 142 p.
(MIRA 17:3)

GOLOMB, L.M.; Prinimali uchastiye: BYKOVA, L.I.; SHALIMOVA, G.V.:
NESKORODEVA, V.I.; KOVZHIN, L.A.

Structural and mechanical properties of vat brilliant green Zh as
suspensions or pastes. Khim.prom. no.8:531-535 Ag '61.

(MIRA 14:8)

1. Filial Gosudarstvennogo nauchno-issledovatel'skogo instituta
organicheskikh poluproduktov i krasiteley, g. Rubezhnoye.
(Dyes and dyeing)

Chem Kinetics of the spontaneous decomposition of potassium ozonides I. A. Kazarnovskii, S. I. Rafkhshtein, and L. N. Bykova. *Doklady Akad. Nauk S.S.S.R.* 108, 641-4 (1956) — Alkali metal ozonides are red, cryst. substances of the general compn. $M^+O_3^-$, formed with the recently identified O_3^- ion (C.A. 43, 3334h); Whaley and Kleindberg, C.A. 43, 454 (h). The ozonides are thermally unstable and slowly decomp. at room temp. into alkali metal peroxides and O_2 . The kinetics of the decompn. are discussed. The reaction proceeds with a measurable velocity at room temp. and at temps. below 0° . The rates of decompn. were measured at $50, 30, 0, -9$, and -18° . The original substance contained 92.9% KO_3 , 5.2% $KOH \cdot H_2O$, and 0.19% KOH . The rate of decompn. was detd. by the vol. of O_2 evolved, and the results are presented graphically. The process is autocatalytic, with induction periods at $20, 0, -9$, and -18° , resp., of 1.07, 20, 54, and 205 days. The induction periods were well reproducible. The activation energy (Arrhenius formula) was 23.4 kcal. at $50-20^\circ$, 22.9 kcal. at $20-0^\circ$, and 21.6 kcal. at 0 to -18° . Hypothetical explanations are offered of the induction period and of the active state.

W. M. Sternberg

BM

Scientific Research Inst. of Physical Chem. im. S. Ya. Kargin

5(2)

AUTHORS: Kazarnovskiy, I. A., Corresponding SOV/20-123-3-26/54
Member, Academy of Sciences, USSR, Raykhshteyn, S. I.,
Bykova, L. N.

TITLE: Investigation of the Reaction Mechanism of Spontaneous
Decomposition of Potassium Ozonide by the Magnetic Method
(Issledovaniye mekhanizma reaktsii samoproizvol'nogo raspada
ozonida kaliya s primeneniym magnitnogo metoda)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 3, pp 475-478
(USSR)

ABSTRACT: It is seen from the kinetics of the reaction under review (Ref 1)
that this reaction takes place according to the equation
$$2 \text{KO}_3 = 2 \text{KO}_2 + \text{O}_2 + 11.6 \text{ kcal.}$$

It is autocatalytic and its
induction period amounts at 18, 0, -9, -18°, respectively, to
1.67, 20, 54, 205 days (24 hours each), respectively. In the
subsequent active period the decomposition rate of potassium
ozonide increases rapidly; the activation energy is 22-23 kcal/mol.
The magnetic measurements were carried out at the same time as
the kinetic ones at 18-20° and 0°. As is known, the initial and
final product are of paramagnetic nature. Both products had

Card 1/4

KRESHKOV, A.P.; BYKOVA, L.N.; MKHITARYAN, N.A.

Potentiometric method of titrating acids with quaternary ammonium bases. Dokl. AN SSSR 132 no.5:1090-1092 Je '60.
(MIRA 13:6)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni D.I. Mendeleeva. Predstavleno akademikom I.V. Tananayevym.
(Potentiometric analysis) (Acids)
(Ammonium compounds)

KRESHKOV, A.P.; BYKOVA, L.N.; SHEMET, N.Sh.

Potentiometric method of differentiated titration of organic bases
in a methyl ethyl ketone medium. Dokl.AN SSSR 134 no.1:96-99
S '60. (MIRA 13:8)

1. Moskovskiy khimiko-tekhnologicheskii institut im. D.I.Mendeleeva.
Predstavleno akad. A.P. Vinogradovym.
(Potentiometric analysis)
(Bases (Chemistry))

S/044/63/000/002/049/050
A060/A126

AUTHOR: Bykova, L.N.

TITLE: On the construction of rules for verb analysis in the English language

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 96, abstract 2V541
(Tr. In-ta tochnoy mekhan. i vychisl. tekhn. AN SSSR, 1961, no. 2, 222 - 239)

TEXT: The author describes the rules for automatically distinguishing the forms of English verbs in: -ing, -ed, and suffixless forms. These rules are based on the data as to the context of the form under consideration. For example, the suffixless verb form has the criteria: 1) "infinitive" if it is preceded by the particle "to"; 2) "imperative mood" if it is not preceded by either "to" or by a prepositionless noun; 3) "present tense" in all the remaining cases. Simultaneously with the elimination of homonymy a syntactic analysis of the sentence is carried out, in the course of which the relationship of the verb under consideration to its preceding and following nouns is established. It is

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On the construction of rules for verb

S/044/63/000/002/049/050
A060/A126

indicated that the rules of analysis described have been verified with a text of 150 sentences.

T.N. Moloshnaya

[Abstracter's note: Complete translation]

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BYKOVA, L. N.

PHASE I BOOK EXPLOITATION

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15

Akademiya nauk SSSR. Institut tochnoy mekhaniki i vychislitel'noy tekhniki.

Trudy (Academy of Sciences of the USSR, Institute of Precision Mechanics and Computer Technology. Transactions) no. 2. Moscow, 1961. 447 p. 1000 copies printed. Contributors not mentioned.

PURPOSE: This collection of articles is intended for scientific and technical personnel concerned with machine translation and computer technology.

COVERAGE: This collection of articles of the Institute of Precision Mechanics and Computer Technology, Academy of Sciences USSR, is the second in a series concerned with machine translation and mathematical linguistics. The collection contains reports written by members of the Machine-Translation Group of the Institute as well as reports by researchers from other organizations. The articles deal with various problems in machine translation, such as the possibility of an intermediate language, relationships between various languages, systems of recording, structure of

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Academy of Sciences (Cont.)

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algorithms, methods of independent analysis of a number of languages (Chinese, German, English, Russian, Rumanian, Swedish, Tartar, etc.), independent synthesis of the Russian language, some problems of binary Japanese-Russian and Chinese-Russian translation, theoretical translation problems, and problems associated with automatic recognition of speech elements and the introduction of written texts. No personalities are mentioned. There are 11 references: 2 Soviet and 9 English.

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Academy of Sciences (Cont.)

SOV/6100

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Card 4/6

BYKOVA, L.N.

Determination of iron in soils by the iodometric method of Han and Vindisch.
Uchenye Zapiski Moskov. Gosudarst. Univ. im. M.V. Lomonosova No.105, Pt.2,
79-81 '46.
(CA 47 no.21:11628 '53)

BYKOVA, L. N.

Cand Geolog-Mineralog Sci

Dissertation: "Cycle of Nitrogen and Ash Elements in Pine Forests of
the Mordovian State Reservation imeni P. G. Snudovich."

16 June 49

Moscow Order of Lenin State V imeni M. V. Lomonosov

SO Vecheryaya Moskva
Sum 71

REMEZOV, N. P., BYKOVA, L. N.

Oak

Consumption and cycle of nutritive elements in an oak forest. Vest. Mosk. un. No. 6,
1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

BY KOVA, L. N.

The dynamics of readily soluble salts in the chestnut-zone soils complex in the Stallgrad-steppes region. N. N. Bolyshev, L. N. Bykova, and E. N. Konnova. *Vestnik Morsk. Univ.* 8, No. 5, Ser. Fiz.-Mat. i Estestven. Nauk No. 3, 101-114(1953).—The authors studied 4 soil types: bright chestnut (I), meadow chestnut (II), solonetz (III), and *Suslikov* (IV). III, with background of I, constitutes more than 50% of soil in the area studied. The zone of accumulation of readily sol. salts is at a depth of 80 cm. for I and at 30-70 cm. for III. All soils studied were sandy loams with lamellar-leafy structure of A horizon. There is a horizon of increased silt and phys. clay (hydroxides or complex organo-mineral compds.), the thickness and quantity, resp., increasing from the crusty-columnar to the deep-columnar varieties of III. The authors consider horizon A as accumulative-eluvial, with increased oxides of Fe and Al owing to intensive biol. processes, while horizon B₁ is dense illuvial, with accumulation of colloidal particles from both weathering and biol. processes. Bicarbonate concn. occurs in horizon B₁ and up to 30-40 cm. and bears little relation to that of chlorides and sulfates, which accumulate in the sub-solonetz layer or deeper; chlorides in forest zone often occurring at 1 m. or more, with less-mobile sulfates at, e.g., 80 cm. The distribution of Ca and Mg is closely related to that of sulfate. During the vegetative period the readily sol. salts remain at greater depths. There is a direct relation of depth with moisture penetration. At the end of July the salts move upward, chlorides somewhat faster than sulfates, owing to capillarity, and perhaps also, owing to suction of root vessels. The development of this migratory horizon with seasonal pulsation of readily sol. salts depends on the thickness and silt content of the illuvial horizon.

A. W. Daly

Utilization and cycle of nitrogen and ash by and in aspen.
N. P. Remerov and L. N. Bykova (M. V. Lomonosov State
Univ., Moscow). *Trudy Vsesoyuznogo Nauchno-Issledovatskogo
Instituta Lesnogo Khozaystva*, 1953, No. 8, 28-41.—
Data are presented on the compn. of aspen leaves, small and
large branches, trunk, and large and small roots from a
10-, 25-, and 50-year stand, showing N, SiO_2 , Fe_2O_3 , Al_2O_3 ,
 MnO , CaO , MgO , K_2O , SO_2 , P_2O_5 , and ash. Analyses of a
dried-up 25-year-old tree show that its Ca content is higher
than in the living tree. The leaves of the 10-year-old tree
have 7.7% ash, while that of steppe grasses in the adjacent
area is 9.94%, with 5.08% K_2O against 2.54% in the leaves
of aspen. Other analyses give data on the unts. of ash and
respective elements found in the fallen leaves, and of the
minerals and N used annually by the 3 age groups of aspen.
From these data unts. are made on the cycle of the dif-
ferent elements.
J. S. Joffe

BYKOVA, L.N.

Methods of the chemical analysis of roots [with summary in English].
Pochvovedenie no. 9:141-145 '58. (MIRA 11:10)

1. Moskovskiy gosudarstennyy universitet.
(Roots(Botany))-Analysis)

REMEZOV, Nil Petrovich; BYKOVA, Lyubov' Nikolayevna; SMIRNOVA, Klavdiya
Mikhaylovna; POMALEN'KAYA, O.T., red.; GEORGIYEVA, G.I., tekhn.red.

[Nitrogen and mineral consumption and cycle in forests of the
European part of the U.S.S.R.] Potreblenie i kurgovorot azota i
zol'nykh elementov v lesakh evropeiskoi chasti SSSR. Moskva,
Izd-vo Mosk.univ., 1959. 282 p. (MIRA 13:3)
(Forests and forestry)

BYKOVA, L.N.; ZYRIN, N.G.

Role of the roots of herbaceous vegetation in the nitrogen and
mineral cycle. Vest.Mosk.un.Ser 6: Biol., pochv. 15 no.3:
67-75 My-Je '60. (MIRA 13:7)

1. Kafedra pochvovedeniya Moskovskogo universiteta.
(Roots (Botany))
(Soils--Composition)

KRESHKOV, A.P.; BYKOVA, L.N.; KAZARYAN, N.A.

Differential titration of strong, weak, and very weak acid mixtures
in methyl ethyl ketone media. Izv.vys.ucheb.zav.; khim.i khim.tekh.
4 no.1:20-24 '61. (MIRA 14:6)

1. Moskovskiy khimiko-tehnologicheskoy institut imeni D.I.
Mendeleyeva, kafedra analiticheskoy khimii.
(Acids) (Titration)